

ABSTRACT OF THE DISCLOSURE

A solid state laser module for amplification of laser radiation. The module includes a laser gain medium having a pair of generally parallel surfaces that form a disc-like shape, that receive and transmit laser radiation. At least one undoped optical medium is disposed adjacent a peripheral edge of the laser gain medium and in optical communication therewith. A source of optical pump radiation directs optical pump radiation into the undoped optical medium generally normal to the parallel surfaces and the undoped optical medium transports the optical pump radiation into the laser gain medium to pump the laser gain medium to a laser transition level. Alternative embodiments include arrangements for directing cooling fluids between adjacently disposed laser gain media.